

**TELVENT**

IT for a Sustainable and Secure World

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Farradyne

## **Traveler Information Data Accuracy and Coverage Needs**

Les Jacobson

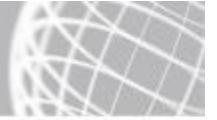
**California 511 Workshop: The 511 Your Customers Want**

March 4, 2008



## Outline

- § User Needs
- § Past work on data needs
- § Considerations
  - § Flexibility
  - § Accuracy
  - § Multimodal
  - § Normal conditions vs incidents or events



## Match Data to User Needs

- § Talk to users
  - § Define your users – be as inclusive as you can!
- § Vision for the 511 system
- § ConOps
- § Requirements



## ITS America Survey of ISPs, 1999

### § Data collection priorities

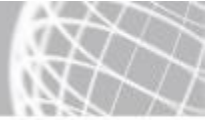
- § Traffic speeds

- § Incidents

- § Road conditions

- § Current and scheduled work zones

- § Weather conditions



# National 511 Coalition

## Basic Content Guidelines – Highways

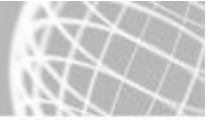
### Content:

- § Construction/maintenance projects
- § Road closures and major delays
  - § Includes major incidents/accidents and congestion
- § Major special events
- § Forecasted weather and road surface conditions
- § In urban areas, add:
  - § All incidents, accidents and congestion information
- § Strong encouragement to deploy if possible
  - § Segment travel times
  - § Observed weather and road surface conditions



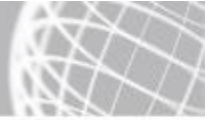
## National 511 Coalition: Data Fusion System

- § Fusion engine must be in place to receive incoming data (automated or manually generated)
- § Fusion engine must be capable of creating structured data (parse-able database) for delivery to dissemination platforms.



## Flexibility

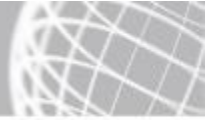
- § Ability to add or change coverage
  - § Needs will change
  - § Conditions will change
  - § Technology will change
  - § Need to be able to respond to or take advantages of changes



## Accuracy

- § User perspective on information accuracy is most important
- § Relative accuracy may be more important than absolute accuracy





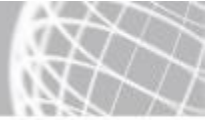
## Multimodal

### § Transit

- § Departure information
- § Location information
- § Schedule adherence

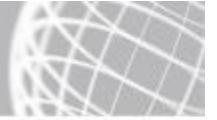
### § Traffic

- § Speed, congestion, travel times
- § Incidents
- § Closures / work zones



## Normal conditions vs incidents or events

- § Are data needs different?
- § What information do users want in these conditions?
  - § Closure information
  - § Detour information
  - § Traffic conditions on detour routes
  - § Information from emergency managers
- § Data in emergencies
  - § Portable devices to cover detours
  - § More input from Maintenance, Police, and Emergency Services



## Bay Area Example: Information Tailored to Event

- § Data Tailored to Event + User Needs
  - § Static maps with detour information
  - § Detour driving times
  - § New “ticker” to share information on all sister sites
  - § Re-structured, flexible menu
  - § Floodgates at more menu locations
  - § Improved floodgate tool
  - § Out of Service Links
    - § Automatically provides new trips when a critical link is out of service
  - § Portable data collection devices



## Other Considerations

- § Geographic Coverage
  - § What areas and facilities will be covered?
  - § Freeways?
  - § Arterials?
  - § Rail?
  - § Buses?
- § Accessibility and Data Ownership
  - § What can you use third party data for?

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Thank you!